

IN THE CLAIMS

The following listing of claims is provided as a courtesy to the Examiner:

Claim 1 (previously presented): A method for determining a deterioration of a battery, comprising:
measuring respective numbers of charge and discharge cycles at a plurality of depths of discharge of the battery;
determining a respective characteristic deterioration value for at least some of the charge and discharge cycles at each of the plurality of depths of discharge using a deterioration curve characteristic of a type of the battery; and
summing the determined characteristic deterioration values so as to obtain the deterioration of the battery.

Claim 2 (original): The method as recited in claim 1 wherein each respective charge and discharge cycle is a respective partial cycle, the measuring being performed so as to measure the respective partial cycle separately.

Claim 3 (original): The method as recited in claim 1 wherein the deterioration curve is a continuous function defining a dependence of each characteristic deterioration value on the depth of the respective charge or discharge for the battery type.

Claim 4 (original): The method as recited in claim 1 wherein the deterioration curve includes approximated intervals having a class width adapted to the respective battery type, the deterioration curve defining a dependence of a respective characteristic deterioration value on the depth of the respective charge or discharge.

Claim 5 (original): The method as recited in claim 1 wherein the deterioration curve is, in at least a section, adapted to a condition currently prevailing in a region of the battery using a weighting factor.

Claim 6 (original): The method as recited in claim 5 wherein the weighting factor is dependent on a temperature.

Claim 7 (original): The method as recited in claim 5 wherein the weighting factor is dependent on a direction and an intensity of a current of the respective charge or discharge cycle.

Claim 8 (original): The method as recited in claim 6 wherein the weighting factor is dependent on a direction and an intensity of a current of the respective charge or discharge cycle.

Claim 9 (original): The method as recited in claim 2 wherein the deterioration curve is a continuous function defining a dependence of each characteristic deterioration value on the depth of the respective charge or discharge for the battery type.

Claim 10 (original): The method as recited in claim 2 wherein the deterioration curve includes approximated intervals having a class width adapted to the respective battery type, the deterioration curve defining a dependence of a respective characteristic deterioration value on the depth of the respective charge or discharge.

Claim 11 (original): The method as recited in claim 2 wherein the deterioration curve is, in at least a section, adapted to a condition currently prevailing in a region of the battery using a weighting factor.

Claim 12 (original): The method as recited in claim 11 wherein the weighting factor is dependent on a temperature.

Claim 13 (original): The method as recited in claim 11 wherein the weighting factor is dependent on a direction and an intensity of a current of the respective charge or discharge cycle.

Claim 14 (original): The method as recited in claim 12 wherein the weighting factor is dependent on a direction and an intensity of a current of the respective charge or discharge cycle.

Claim 15 (original): The method as recited in claim 1 wherein the at least some of the charge and discharge cycles does not include charge or discharge cycles having a respective depth of charge or discharge below a predetermined limit.

Claim 16 (original): The method as recited in claim 1 wherein the battery is configured to be used in a motor vehicle for supplying electric power to electronic auxiliary components.

Claim 17 (original): The method as recited in claim 1 wherein the battery is configured to be used in a motor vehicle for supplying electric power to propulsion components.

Claim 18 (original): The method as recited in claim 2 wherein the at least some of the charge and discharge cycles does not include charge or discharge cycles having a respective depth of charge or discharge below a predetermined limit.

Claim 19 (original): The method as recited in claim 2 wherein the battery is configured to be used in a motor vehicle for supplying electric power to electronic auxiliary components.

Claim 20 (original): The method as recited in claim 2 wherein the battery is configured to be used in a motor vehicle for supplying electric power to propulsion components.